

First Hit**End of Result Set**

L4: Entry 2 of 2

File: DWPI

Mar 29, 2002

DERWENT-ACC-NO: 2002-431312

DERWENT-WEEK: 200246

COPYRIGHT 2004 DERWENT INFORMATION LTD

TITLE: Discharge formation device has suppressing unit that suppresses discharge current resulting from gas discharge.

PATENT-ASSIGNEE: MATSUSHITA DENKI SANGYO KK (MATU)

PRIORITY-DATA: 2000JP-0279664 (September 14, 2000)

Search Selected

Search ALL

Clear

## PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
<input type="checkbox"/> JP 2002093379 A	March 29, 2002		022	H01J065/00

## APPLICATION-DATA:

PUB-NO	APPL-DATE	APPL-NO	DESCRIPTOR
JP2002093379A	September 14, 2000	2000JP-0279664	

INT-CL (IPC): H01 J 11/00; H01 J 11/02; H01 J 61/30; H01 J 65/00; H04 N 5/66

ABSTRACTED-PUB-NO: JP2002093379A

## BASIC-ABSTRACT:

NOVELTY - The discharge formation device includes a centralization unit which centralizes the gas discharge. A suppressing unit performs the suppression of the discharge current resulting from the gas discharge.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (a) an electroluminescence device;
- (b) a plasma display panel;
- (c) a lighting system;
- (d) and a display unit.

USE - For a lighting system used for display units.

ADVANTAGE - Performs a very strong and stable positive column discharge operation.

DESCRIPTION OF DRAWING(S) - The figures show the explanatory drawing of the electroluminescence device. (Drawing includes non-English language text).

ABSTRACTED-PUB-NO: JP2002093379A  
EQUIVALENT-ABSTRACTS:

CHOSEN-DRAWING: Dwg.1/17

DERWENT-CLASS: W03 X26  
EPI-CODES: W03-A08; X26-A01A; X26-A01C; X26-A02A2;

First Hit**End of Result Set**

L5: Entry 2 of 2

File: DWPI

Sep 16, 2003

DERWENT-ACC-NO: 2000-309515

DERWENT-WEEK: 200361

COPYRIGHT 2004 DERWENT INFORMATION LTD

TITLE: Low pressure discharge lamp for use in copier, facsimile, has glass substrates provided with electrodes which are arranged in parallel placed on opposite sides of board housing sealed with noble gas

PATENT-ASSIGNEE: MATSUSHITA DENKI SANGYO KK (MATU)

PRIORITY-DATA: 1998JP-0256533 (September 10, 1998)

Search Selected	Search ALL	Clear
-----------------	------------	-------

## PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
<input type="checkbox"/> JP 3446622 B2	September 16, 2003		005	H01J065/00
<input type="checkbox"/> JP 2000090884 A	March 31, 2000		006	H01J065/00

## APPLICATION-DATA:

PUB-NO	APPL-DATE	APPL-NO	DESCRIPTOR
JP 3446622B2	September 10, 1998	1998JP-0256533	
JP 3446622B2		JP2000090884	Previous Publ.
JP2000090884A	September 10, 1998	1998JP-0256533	

INT-CL (IPC): H01 J 61/067; H01 J 61/30; H01 J 61/35; H01 J 65/00; H05 B 41/30

ABSTRACTED-PUB-NO: JP2000090884A

## BASIC-ABSTRACT:

NOVELTY - Mutually insulated parallel electrodes (21-29) are formed on a pair of glass substrates (1) that are covered by a dielectric (3) which is coated with a fluorescent material (5). A magnesium oxide film (4) is provided between the dielectric and the fluorescent material. The glass substrates are arranged facing each other in a board housing sealed with a mobile gas.

USE - For use in copier, facsimile. Also used as liquid crystal backlight.

ADVANTAGE - Ultraviolet radiation and visible light radiation efficiency are improved by coating fluorescent material on dielectric.

DESCRIPTION OF DRAWING(S) - The figure shows the structure of low pressure discharge lamp.

Substrate 1

First Hit**End of Result Set**

L10: Entry 2 of 2

File: DWPI

Aug 21, 1998

DERWENT-ACC-NO: 1998-511064

DERWENT-WEEK: 199845

COPYRIGHT 2004 DERWENT INFORMATION LTD

TITLE: Planar light source for display devices e.g. OA apparatus, game machine, car navigation system, word processor - has pair of discharge electrodes made of aluminium, provided mutually parallel to outer surface of front board

PATENT-ASSIGNEE: HITACHI LTD (HITA)

PRIORITY-DATA: 1997JP-0021269 (February 4, 1997)

Search Selected

Search ALL

Clear

## PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
<input type="checkbox"/> JP 10222083 A	August 21, 1998		005	G09F009/00

## APPLICATION-DATA:

PUB-NO	APPL-DATE	APPL-NO	DESCRIPTOR
JP 10222083A	February 4, 1997	1997JP-0021269	

INT-CL (IPC): G02 F 1/1335; G09 F 9/00; H01 J 61/30; H01 J 61/35; H01 J 65/00

ABSTRACTED-PUB-NO: JP 10222083A

BASIC-ABSTRACT:

The light source has a front board (10), an insulated substrate (20) and a side plate (50) which are combined to form an airtight container. A fluorescent material (60) is coated on the interior side of the substrate. Mercury and a discharge gas are sealed in a discharge space (30).

A pair of discharge electrodes (90,91) made of aluminium is provided mutually parallel to outer surface of the front board. The electrodes positioned at both ends of the discharge space are bonded to the front board using a metal tape.

ADVANTAGE - Provides high luminous efficiency. Reduces power consumption. Reduces area of discharge electrode. Ensures safety by preventing electric shock.

ABSTRACTED-PUB-NO: JP 10222083A

EQUIVALENT-ABSTRACTS:

CHOSEN-DRAWING: Dwg.1/5

DERWENT-CLASS: P81 P85 U14 W05 X26

EPI-CODES: U14-K01A4C; W05-E05B; X26-A01A; X26-A01C; X26-A02A2;

First Hit**End of Result Set**

L1: Entry 2 of 2

File: DWPI

Aug 21, 1998

DERWENT-ACC-NO: 1998-511064

DERWENT-WEEK: 199845

COPYRIGHT 2004 DERWENT INFORMATION LTD

TITLE: Planar light source for display devices e.g. OA apparatus, game machine, car navigation system, word processor - has pair of discharge electrodes made of aluminium, provided mutually parallel to outer surface of front board

PATENT-ASSIGNEE: HITACHI LTD (HITA)

PRIORITY-DATA: 1997JP-0021269 (February 4, 1997)

Search Selected	Search ALL	Clear
-----------------	------------	-------

## PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
<input type="checkbox"/> JP 10222083 A	August 21, 1998		005	G09F009/00

## APPLICATION-DATA:

PUB-NO	APPL-DATE	APPL-NO	DESCRIPTOR
JP 10222083A	February 4, 1997	1997JP-0021269	

INT-CL (IPC): G02 F 1/1335; G09 F 9/00; H01 J 61/30; H01 J 61/35; H01 J 65/00

ABSTRACTED-PUB-NO: JP 10222083A

## BASIC-ABSTRACT:

The light source has a front board (10), an insulated substrate (20) and a side plate (50) which are combined to form an airtight container. A fluorescent material (60) is coated on the interior side of the substrate. Mercury and a discharge gas are sealed in a discharge space (30).

A pair of discharge electrodes (90,91) made of aluminium is provided mutually parallel to outer surface of the front board. The electrodes positioned at both ends of the discharge space are bonded to the front board using a metal tape.

ADVANTAGE - Provides high luminous efficiency. Reduces power consumption. Reduces area of discharge electrode. Ensures safety by preventing electric shock.

ABSTRACTED-PUB-NO: JP 10222083A

## EQUIVALENT-ABSTRACTS:

CHOSEN-DRAWING: Dwg.1/5

DERWENT-CLASS: P81 P85 U14 W05 X26

EPI-CODES: U14-K01A4C; W05-E05B; X26-A01A; X26-A01C; X26-A02A2;

First Hit**End of Result Set**

L1: Entry 2 of 2

File: DWPI

Aug 21, 1998

DERWENT-ACC-NO: 1998-511064

DERWENT-WEEK: 199845

COPYRIGHT 2004 DERWENT INFORMATION LTD

TITLE: Planar light source for display devices e.g. OA apparatus, game machine, car navigation system, word processor - has pair of discharge electrodes made of aluminium, provided mutually parallel to outer surface of front board

PATENT-ASSIGNEE: HITACHI LTD (HITA)

PRIORITY-DATA: 1997JP-0021269 (February 4, 1997)

Search Selected

Search ALL

Clear

## PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
<input type="checkbox"/> JP 10222083 A	August 21, 1998		005	G09F009/00

## APPLICATION-DATA:

PUB-NO	APPL-DATE	APPL-NO	DESCRIPTOR
JP 10222083A	February 4, 1997	1997JP-0021269	

INT-CL (IPC): G02 F 1/1335; G09 F 9/00; H01 J 61/30; H01 J 61/35; H01 J 65/00

ABSTRACTED-PUB-NO: JP 10222083A

## BASIC-ABSTRACT:

The light source has a front board (10), an insulated substrate (20) and a side plate (50) which are combined to form an airtight container. A fluorescent material (60) is coated on the interior side of the substrate. Mercury and a discharge gas are sealed in a discharge space (30).

A pair of discharge electrodes (90,91) made of aluminium is provided mutually parallel to outer surface of the front board. The electrodes positioned at both ends of the discharge space are bonded to the front board using a metal tape.

ADVANTAGE - Provides high luminous efficiency. Reduces power consumption. Reduces area of discharge electrode. Ensures safety by preventing electric shock.

ABSTRACTED-PUB-NO: JP 10222083A

## EQUIVALENT-ABSTRACTS:

CHOSEN-DRAWING: Dwg.1/5

DERWENT-CLASS: P81 P85 U14 W05 X26

EPI-CODES: U14-K01A4C; W05-E05B; X26-A01A; X26-A01C; X26-A02A2;

First Hit**End of Result Set**

L12: Entry 1 of 1

File: DWPI

Aug 21, 2003

DERWENT-ACC-NO: 1998-507622

DERWENT-WEEK: 200412

COPYRIGHT 2004 DERWENT INFORMATION LTD

TITLE: Flat panel gas discharge visible light emitter - has rectangular housing with cathode and anode strips formed in parallel on base and brought out to edge strips

INVENTOR: HITZSCHKE, L; JEREVIC, S ; VOLLKOMMER, F

PATENT-ASSIGNEE: PATENT-TREUHAND-GES ELEKTRISCHE GLUEHLAM (PATT)

PRIORITY-DATA: 1997DE-1011893 (March 21, 1997)

Search Selected

Search ALL

Clear

## PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
<input type="checkbox"/> KR 385009 B	August 21, 2003		000	H01J061/00
<input type="checkbox"/> DE 19711893 A1	September 24, 1998		008	H01J065/00
<input type="checkbox"/> WO 9843278 A2	October 1, 1998	G	000	H01J061/00
<input type="checkbox"/> EP 912992 A2	May 6, 1999	G	000	H01J061/00
<input type="checkbox"/> CN 1220770 A	June 23, 1999		000	H01J065/04
<input type="checkbox"/> JP 2000500917 W	January 25, 2000		018	H01J061/92
<input type="checkbox"/> HU 200000674 A2	June 28, 2000		000	H01J061/00
<input type="checkbox"/> KR 2000015789 A	March 15, 2000		000	H01J061/00
<input type="checkbox"/> TW 414917 A	December 11, 2000		000	H01J065/00
<input type="checkbox"/> US 6252352 B1	June 26, 2001		000	H01J061/00
<input type="checkbox"/> JP 3249538 B2	January 21, 2002		006	H01J061/30
<input type="checkbox"/> EP 912992 B1	October 15, 2003	G	000	H01J061/00
<input type="checkbox"/> DE 59809916 G	November 20, 2003		000	H01J061/00

DESIGNATED-STATES: CA CN HU JP KR US AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL  
PT SE BE DE DK ES FI FR GB IT NL SE BE DE DK ES FI FR GB IT NL SE

## APPLICATION-DATA:

PUB-NO	APPL-DATE	APPL-NO	DESCRIPTOR
KR 385009B	March 20, 1998	1998WO-DE00830	
KR 385009B	November 19, 1998	1998KR-0709337	

KR 385009B		KR2000015789	Previous Publ.
KR 385009B		WO 9843278	Based on
DE 19711893A1	March 21, 1997	1997DE-1011893	
WO 9843278A2	March 20, 1998	1998WO-DE00830	
EP 912992A2	March 20, 1998	1998EP-0925421	
EP 912992A2	March 20, 1998	1998WO-DE00830	
EP 912992A2		WO 9843278	Based on
CN 1220770A	March 20, 1998	1998CN-0800319	
JP2000500917W	March 20, 1998	1998JP-0544687	
JP2000500917W	March 20, 1998	1998WO-DE00830	
JP2000500917W		WO 9843278	Based on
HU 200000674A2	March 20, 1998	1998WO-DE00830	
HU 200000674A2	March 20, 1998	2000HU-0000674	
HU 200000674A2		WO 9843278	Based on
KR2000015789A	March 20, 1998	1998WO-DE00830	
KR2000015789A	November 19, 1998	1998KR-0709337	
KR2000015789A		WO 9843278	Based on
TW 414917A	March 20, 1998	1998TW-0104179	
US 6252352B1	March 20, 1998	1998WO-DE00830	
US 6252352B1	November 17, 1998	1998US-0180856	
US 6252352B1		WO 9843278	Based on
JP 3249538B2	March 20, 1998	1998JP-0544687	
JP 3249538B2	March 20, 1998	1998WO-DE00830	
JP 3249538B2		JP 200000917	Previous Publ.
JP 3249538B2		WO 9843278	Based on
EP 912992B1	March 20, 1998	1998EP-0925421	
EP 912992B1	March 20, 1998	1998WO-DE00830	
EP 912992B1		WO 9843278	Based on
DE 59809916G	March 20, 1998	1998DE-0509916	
DE 59809916G	March 20, 1998	1998EP-0925421	
DE 59809916G	March 20, 1998	1998WO-DE00830	
DE 59809916G		EP 912992	Based on
DE 59809916G		WO 9843278	Based on

INT-CL (IPC): H01 J 61/00; H01 J 61/06; H01 J 61/30; H01 J 61/92; H01 J 65/00; H01 J 65/04

ABSTRACTED-PUB-NO: DE 19711893A  
BASIC-ABSTRACT:

The flat panel unit emits visible light and is in the form of a rectangular cross section discharge tube that has a base plate, cover plate and a frame that are bonded together with a glass solder for a complete seal.

Strip formed cathodes (12,15) and anodes (8,9a) are formed alternately on the base plate as parallel elements. Additional anodes (9b) are formed between the cathodes to provide uniform light density. Anode and cathodes are brought out to edge strips (23,24).

USE - Room lighting, LCD back lighting.





US006252352B1

(12) **United States Patent**  
**Vollkommer et al.**

(10) **Patent No.:** **US 6,252,352 B1**  
(45) **Date of Patent:** **\*Jun. 26, 2001**

(54) **FLAT LIGHT EMITTER**

(75) **Inventors:** **Frank Vollkommer, Buchendorf;**  
**Lothar Hitzschke; Simon Jerebic, both**  
**of Munich, all of (DE)**

(73) **Assignee:** **Patent-Treuhand-Gesellschaft fuer**  
**Elektrische Gluehlampen mbH,**  
**Munich (DE)**

(\*) **Notice:** Subject to any disclaimer, the term of this  
patent is extended or adjusted under 35  
U.S.C. 154(b) by 0 days.

This patent is subject to a terminal dis-  
claimer.

(21) **Appl. No.:** **09/180,856**

(22) **PCT Filed:** **Mar. 20, 1998**

(86) **PCT No.:** **PCT/DE98/00830**

§ 371 Date: **Nov. 17, 1998**

§ 102(e) Date: **Nov. 17, 1998**

(87) **PCT Pub. No.:** **WO98/43278**

**PCT Pub. Date: Oct. 1, 1998**

(30) **Foreign Application Priority Data**

Mar. 21, 1997 (DE) ..... 197 11 893

(51) **Int. Cl.<sup>7</sup>** ..... **H01J 61/00**

(52) **U.S. Cl.** ..... **313/574; 313/485; 313/491;**  
**313/483**

(58) **Field of Search** ..... **313/318.12, 483,**  
**313/484, 485, 491, 492, 494, 495, 496,**  
**497; 345/55, 74, 75, 355**

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

5,070,273 \* 12/1991 Van Den Bogert et al. .... 313/607  
5,073,743 \* 12/1991 Kajiwara et al. .... 33/346 R  
5,266,865 \* 11/1993 Haizumi et al. .... 313/506

5,276,378 \* 1/1994 Gothard ..... 313/491  
5,463,274 \* 10/1995 Winsor ..... 313/493

**FOREIGN PATENT DOCUMENTS**

19526211 1/1997 (DE) .  
0363832 4/1990 (EP) .  
0547366 6/1993 (EP) .  
2668634 4/1992 (FR) .  
2079046 1/1982 (GB) .  
9423442 10/1991 (WO) .

**OTHER PUBLICATIONS**

Patent Abstracts of Japan, vol. 097, No. 009, Sep. 30, 1997,  
& JP 09 120799 A (Nec Home Electron Ltd), May 6, 1997,  
siehe Zusammenfassung.

Patent Abstracts of Japan, vol. 013, No. 031 (E-707), Jan.  
24, 1989 & JP 63 232261 A (Sanyo Electric Co Ltd), Sep.  
28, 1998, siehe Zusammenfassung.

\* cited by examiner

*Primary Examiner*—Nimeshkumar D. Patel

*Assistant Examiner*—Matthew J. Gerike

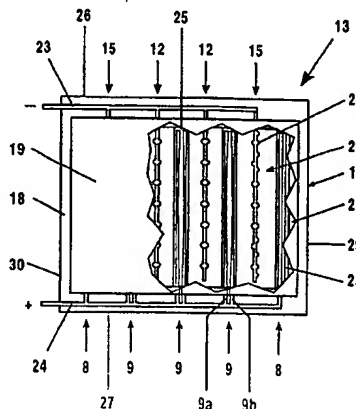
(74) *Attorney, Agent, or Firm*—Robert F. Clark

(57)

**ABSTRACT**

A flat radiator having dielectrically impeded, strip-like cathodes (12;15) and anodes (8;9a) which are arranged alternately next to one another on the wall of the discharge vessel (14) has in each case an additional anode (9b) between neighbouring cathodes (12;12,15), that is to say an anode pair (9) is arranged in each case between the cathodes (12;12,15). The cathodes (15) have nose-like extensions (28) which face the respectively neighbouring anodes (8) and are arranged more densely in a spatially increasing fashion in the direction of the edges (26,27) of the flat radiator (13). As an alternative or in addition thereto, the two anode strips (9a,9b) of each anode pair (9) are widened in the direction of the edges (26,27) of the flat radiator (13) at one end in the direction of the respective partner strip (9b or 9a). Owing to these measures, the surface luminous density of the flat radiator (13) is largely constant towards the edges (26,27, 29,30) in pulsed operation.

**27 Claims, 3 Drawing Sheets**



First Hit**End of Result Set**

L11: Entry 1 of 1

File: DWPI

Apr 18, 2003

DERWENT-ACC-NO: 1998-532294

DERWENT-WEEK: 200359

COPYRIGHT 2004 DERWENT INFORMATION LTD

TITLE: Flat fluorescent lamp for background lighting or liquid crystal display - has strip-shaped anode and cathode electrodes and their associated current leads provided as conductor path structures

INVENTOR: HITZSCHKE, L; VOLLKOMMER, F

PATENT-ASSIGNEE: PATENT-TREUHAND-GES ELEKTRISCHE GLUEHLAM (PATT)

PRIORITY-DATA: 1997DE-1029181 (July 8, 1997), 1997DE-1011890 (March 21, 1997)

Search Selected

Search ALL

Clear

## PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
<input type="checkbox"/> KR 375615 B	April 18, 2003		000	H01J061/00
<input type="checkbox"/> WO 9843277 A2	October 1, 1998	G	042	H01J061/00
<input type="checkbox"/> EP 912991 A2	May 6, 1999	G	000	
<input type="checkbox"/> CN 1220771 A	June 23, 1999		000	H01J065/04
<input type="checkbox"/> US 6034470 A	March 7, 2000		000	H01J061/00
<input type="checkbox"/> JP 2000503801 W	March 28, 2000		035	H01J061/30
<input type="checkbox"/> HU 200000863 A2	August 28, 2000		000	H01J061/00
<input type="checkbox"/> KR 2000015788 A	March 15, 2000		000	H01J061/00

DESIGNATED-STATES: CA CN HU JP KR US AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL  
PT SE AT BE DE DK ES FI FR GB IT NL SE

CITED-DOCUMENTS: No-SR. Pub

## APPLICATION-DATA:

PUB-NO	APPL-DATE	APPL-NO	DESCRIPTOR
KR 375615B	March 20, 1998	1998WO-DE00827	
KR 375615B	November 19, 1998	1998KR-0709336	
KR 375615B		KR2000015788	Previous Publ.
KR 375615B		WO 9843277	Based on
WO 9843277A2	March 20, 1998	1998WO-DE00827	
EP 912991A2	March 20, 1998	1998EP-0925418	
EP 912991A2	March 20, 1998	1998WO-DE00827	

EP 912991A2		WO 9843277	Based on
CN 1220771A	March 20, 1998	1998CN-0800323	
US 6034470A	March 20, 1998	1998WO-DE00827	
US 6034470A	November 17, 1998	1998US-0180861	
US 6034470A		WO 9843277	Based on
JP2000503801W	March 20, 1998	1998JP-0544685	
JP2000503801W	March 20, 1998	1998WO-DE00827	
JP2000503801W		WO 9843277	Based on
HU 200000863A2	March 20, 1998	1998WO-DE00827	
HU 200000863A2	March 20, 1998	2000HU-0000863	
HU 200000863A2		WO 9843277	Based on
KR2000015788A	March 20, 1998	1998WO-DE00827	
KR2000015788A	November 19, 1998	1998KR-0709336	
KR2000015788A		WO 9843277	Based on

INT-CL (IPC): F21 V 7/00; G02 F 1/1335; H01 J 61/00; H01 J 61/067; H01 J 61/30; H01 J 65/00; H01 J 65/04.

RELATED-ACC-NO: 1998-507621;1998-532293 ;1999-634055

ABSTRACTED-PUB-NO: US 6034470A  
BASIC-ABSTRACT:

The lamp has a number of strip-shaped anode and cathode electrodes (5,6;3,4) extending parallel to one another within the gas discharge envelope (2), with a gas discharge impeding dielectric layer (15) between the anodes and the gas filling.

The gas discharge envelope has a base and cover plate (7,8) held together by a peripheral frame (9), with solder providing a gas-tight seal between them, the electrodes and their associated current leads (13,14) provided by conductor path structures with a thickness of between 5 and 50  $\mu$  .

USE - For background lighting system. For illuminating liquid crystal flat screen image display.

ADVANTAGE - Allows simple manufacture of varying lamp sizes and electrode shapes.

ABSTRACTED-PUB-NO: WO 9843277A  
EQUIVALENT-ABSTRACTS:

The lamp has a number of strip-shaped anode and cathode electrodes (5,6;3,4) extending parallel to one another within the gas discharge envelope (2), with a gas discharge impeding dielectric layer (15) between the anodes and the gas filling.

The gas discharge envelope has a base and cover plate (7,8) held together by a peripheral frame (9), with solder providing a gas-tight seal between them, the electrodes and their associated current leads (13,14) provided by conductor path structures with a thickness of between 5 and 50  $\mu$  .

USE - For background lighting system. For illuminating liquid crystal flat screen image display.

ADVANTAGE - Allows simple manufacture of varying lamp sizes and electrode shapes.

First Hit**End of Result Set**

L15: Entry 1 of 1

File: DWPI

Jul 10, 2003

DERWENT-ACC-NO: 1998-532293

DERWENT-WEEK: 200347

COPYRIGHT 2004 DERWENT INFORMATION LTD

TITLE: Gas discharge lamp for dielectrically-impeded discharge for lighting system or flat screen image display - has anode electrodes arranged in pairs positioned between two cathode electrodes, each lying adjacent to one of anode electrodes

INVENTOR: HITZSCHKE, L; VOLLKOMMER, F ; JEREbic, S ; MUECKE, J ; SIEBAUER, R

PATENT-ASSIGNEE: PATENT-TREUHAND-GES ELEKTRISCHE GLUEHLAM (PATT), HITZSCHKE L (HITZI), VOLLKOMMER F (VOLLI)

PRIORITY-DATA: 1997DE-1029181 (July 8, 1997), 1997DE-1011890 (March 21, 1997), 1997DE-1011892 (March 21, 1997)

Search Selected

Search ALL

Clear

## PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
<input type="checkbox"/> <u>DE 59808602 G</u>	July 10, 2003		000	H01J061/00
<input type="checkbox"/> <u>WO 9843276 A2</u>	October 1, 1998	G	053	H01J061/00
<input type="checkbox"/> <u>EP 912990 A2</u>	May 6, 1999	G	000	
<input type="checkbox"/> <u>CN 1220767 A</u>	June 23, 1999		000	
<input type="checkbox"/> <u>DE 19817480 A1</u>	September 23, 1999		000	H01J065/04
<input type="checkbox"/> <u>JP 2000500916 W</u>	January 25, 2000		044	H01J061/92
<input type="checkbox"/> <u>HU 200000675 A2</u>	June 28, 2000		000	H01J061/00
<input type="checkbox"/> <u>JP 3098260 B2</u>	October 16, 2000		017	H01J061/30
<input type="checkbox"/> <u>KR 2000015787 A</u>	March 15, 2000		000	H01J061/00
<input type="checkbox"/> <u>TW 412770 A</u>	November 21, 2000		000	H01J061/00
<input type="checkbox"/> <u>TW 412771 A</u>	November 21, 2000		000	H01J061/00
<input type="checkbox"/> <u>US 6246171 B1</u>	June 12, 2001		000	H01J061/92
<input type="checkbox"/> <u>JP 3264938 B2</u>	March 11, 2002		013	H01J061/30
<input type="checkbox"/> <u>EP 912990 B1</u>	June 4, 2003	G	000	H01J061/00

DESIGNATED-STATES: CA CN HU JP KR US AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE AT BE CH DE DK ES FI FR GB IT LI NL SE AT BE CH DE DK ES FI FR GB IT LI NL SE

CITED-DOCUMENTS: No-SR. Pub

## APPLICATION-DATA:

PUB-NO	APPL-DATE	APPL-NO	DESCRIPTOR
DE 59808602G	March 20, 1998	1998DE-0508602	
DE 59808602G	March 20, 1998	1998EP-0925417	
DE 59808602G	March 20, 1998	1998WO-DE00826	
DE 59808602G		EP 912990	Based on
DE 59808602G		WO 9843276	Based on
WO 9843276A2	March 20, 1998	1998WO-DE00826	
EP 912990A2	March 20, 1998	1998EP-0925417	
EP 912990A2	March 20, 1998	1998WO-DE00826	
EP 912990A2		WO 9843276	Based on
CN 1220767A	March 20, 1998	1998CN-0800335	
DE 19817480A1	April 20, 1998	1998DE-1017480	
JP2000500916W	March 20, 1998	1998JP-0544684	
JP2000500916W	March 20, 1998	1998WO-DE00826	
JP2000500916W		WO 9843276	Based on
HU 200000675A2	March 20, 1998	1998WO-DE00826	
HU 200000675A2	March 20, 1998	2000HU-0000675	
HU 200000675A2		WO 9843276	Based on
JP 3098260B2	March 20, 1998	1998JP-0544684	
JP 3098260B2	March 20, 1998	1998WO-DE00826	
JP 3098260B2		JP 200000916	Previous Publ.
JP 3098260B2		WO 9843276	Based on
KR2000015787A	March 20, 1998	1998WO-DE00826	
KR2000015787A	November 19, 1998	1998KR-0709335	
KR2000015787A		WO 9843276	Based on
TW 412770A	March 20, 1998	1998TW-0104177	
TW 412771A	March 20, 1998	1998TW-0104181	
US 6246171B1	March 20, 1998	1998WO-DE00826	
US 6246171B1	November 17, 1998	1998US-0180855	
US 6246171B1		WO 9843276	Based on
JP 3264938B2	March 20, 1998	1998JP-0544685	
JP 3264938B2	March 20, 1998	1998WO-DE00827	
JP 3264938B2		JP 200003801	Previous Publ.
JP 3264938B2		WO 9843277	Based on
EP 912990B1	March 20, 1998	1998EP-0925417	
EP 912990B1	March 20, 1998	1998WO-DE00826	
EP 912990B1		WO 9843276	Based on

INT-CL (IPC): F21 V 7/00; G02 F 1/13357; H01 J 61/00; H01 J 61/067; H01 J 61/30;  
H01 J 61/92; H01 J 65/00; H01 J 65/04

RELATED-ACC-NO: 1998-507621;1998-532294 ;1999-634055

ABSTRACTED-PUB-NO: US 6246171B

BASIC-ABSTRACT:

The lamp has a number of strip-shaped anode and cathode electrodes (205,206;203,204) extending parallel to one another within the gas discharge

envelope (202), with a gas discharge impeding dielectric layer (215) between the anodes and the gas filling.

The anode electrodes are arranged in pairs, each lying between a pair of cathode electrodes, each positioned adjacent one of the anode electrodes, with the spacing between the anode electrodes of each pair being less than the spacing between each anode electrode and the adjacent cathode electrode.

ADVANTAGE - Allows high packing density of electrode structures for high light output.

ABSTRACTED-PUB-NO: WO 9843276A  
EQUIVALENT-ABSTRACTS:

The lamp has a number of strip-shaped anode and cathode electrodes (205,206;203,204) extending parallel to one another within the gas discharge envelope (202), with a gas discharge impeding dielectric layer (215) between the anodes and the gas filling.

The anode electrodes are arranged in pairs, each lying between a pair of cathode electrodes, each positioned adjacent one of the anode electrodes, with the spacing between the anode electrodes of each pair being less than the spacing between each anode electrode and the adjacent cathode electrode.

ADVANTAGE - Allows high packing density of electrode structures for high light output.

CHOSEN-DRAWING: Dwg.7a/14

DERWENT-CLASS: P81 Q71 U14 W05 X26.  
EPI-CODES: U14-K01A4C; W05-E05B; X26-A; X26-A01A; X26-A01C;

First Hit**End of Result Set**

L2: Entry 1 of 1

File: DWPI

Jul 1, 2003

DERWENT-ACC-NO: 1998-170076

DERWENT-WEEK: 200347

COPYRIGHT 2004 DERWENT INFORMATION LTD

TITLE: Discharge lamp for building lighting or backlighting - has sites created for local amplification of electric field during pulsed operation by having local discharges at these sites

INVENTOR: HITZSCHKE, L; MUECKE, J ; SIEBAUER, R ; VOLLKOMMER, F

PATENT-ASSIGNEE: PATENT-TREUHAND-GES ELEKTRISCHE GLUEHLAM (PATT)

PRIORITY-DATA: 1996DE-1036965 (September 11, 1996)

Search Selected

Search ALL

Clear

## PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
<input type="checkbox"/> <u>ES 2188981 T3</u>	July 1, 2003		000	H01J065/00
<input type="checkbox"/> <u>DE 19636965 A1</u>	March 12, 1998		010	H01J065/04
<input type="checkbox"/> <u>WO 9811596 A1</u>	March 19, 1998	G	033	H01J065/00
<input type="checkbox"/> <u>EP 895653 A1</u>	February 10, 1999	G	000	H01J065/00
<input type="checkbox"/> <u>CN 1200840 A</u>	December 2, 1998		000	H01J065/00
<input type="checkbox"/> <u>HU 9901298 A2</u>	August 30, 1999		000	H01J065/00
<input type="checkbox"/> <u>JP 2000500277 W</u>	January 11, 2000		025	H01J065/00
<input type="checkbox"/> <u>US 6060828 A</u>	May 9, 2000		000	H01J011/00
<input type="checkbox"/> <u>KR 99067475 A</u>	August 25, 1999		000	H01J065/06
<input type="checkbox"/> <u>HU 220260 B</u>	November 28, 2001		000	H01J065/00
<input type="checkbox"/> <u>TW 451255 A</u>	August 21, 2001		000	H01J065/04
<input type="checkbox"/> <u>EP 895653 B1</u>	November 20, 2002	G	000	H01J065/00
<input type="checkbox"/> <u>DE 59708773 G</u>	January 2, 2003		000	H01J065/00
<input type="checkbox"/> <u>KR 351344 B</u>	November 18, 2002		000	H01J065/06

DESIGNATED-STATES: CA CN HU JP KR US AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL  
PT SE AT BE CH DE ES FI FR GB IT LI NL SE AT BE CH DE ES FI FR GB IT LI NL SE

## APPLICATION-DATA:

PUB-NO	APPL-DATE	APPL-NO	DESCRIPTOR
ES 2188981T3	September 8, 1997	1997EP-0942813	

ES 2188981T3		EP 895653	Based on
DE 19636965A1	September 11, 1996	1996DE-1036965	
WO 9811596A1	September 8, 1997	1997WO-DE01989	
EP 895653A1	September 8, 1997	1997EP-0942813	
EP 895653A1	September 8, 1997	1997WO-DE01989	
EP 895653A1		WO 9811596	Based on
CN 1200840A	September 8, 1997	1997CN-0191219	
HU 9901298A2	September 8, 1997	1997WO-DE01989	
HU 9901298A2	September 8, 1997	1999HU-0001298	
HU 9901298A2		WO 9811596	Based on
JP2000500277W	September 8, 1997	1997WO-DE01989	
JP2000500277W	September 8, 1997	1998JP-0513143	
JP2000500277W		WO 9811596	Based on
US 6060828A	September 8, 1997	1997WO-DE01989	
US 6060828A	May 6, 1998	1998US-0068477	
US 6060828A		WO 9811596	Based on
KR 99067475A	September 8, 1997	1997WO-DE01989	
KR 99067475A	May 11, 1998	1998KR-0703489	
KR 99067475A		WO 9811596	Based on
HU 220260B	September 8, 1997	1997WO-DE01989	
HU 220260B	September 8, 1997	1999HU-0001298	
HU 220260B		WO 9811596	Based on
TW 451255A	August 19, 1997	1997TW-0111837	
EP 895653B1	September 8, 1997	1997EP-0942813	
EP 895653B1	September 8, 1997	1997WO-DE01989	
EP 895653B1		WO 9811596	Based on
DE 59708773G	September 8, 1997	1997DE-0508773	
DE 59708773G	September 8, 1997	1997EP-0942813	
DE 59708773G	September 8, 1997	1997WO-DE01989	
DE 59708773G		EP 895653	Based on
DE 59708773G		WO 9811596	Based on
KR 351344B	September 8, 1997	1997WO-DE01989	
KR 351344B	May 11, 1998	1998KR-0703489	
KR 351344B		KR 99067475	Previous Publ.
KR 351344B		WO 9811596	Based on

INT-CL (IPC): H01 J 11/00; H01 J 61/52; H01 J 65/00; H01 J 65/04; H01 J 65/06

ABSTRACTED-PUB-NO: DE 19636965A  
BASIC-ABSTRACT:

The lamp has an electric field generated between the electrodes during pulsed operation. Through the construction of at least one of the electrodes and/or the dielectric material separating at least one electrode from the inside of the container, sites are created for local amplification of the electric field.

During the pulsed operation, one or more dielectrically hindered individual discharges are generated exclusively at these sites, but no more than one discharge per site. The mutual distances between the sites is chosen so that the discharges



do not overlap. The distance normalised to the maximum extent of a discharge lies between 0.9 and 1.3.

USE - For office and home lighting, or backlighting liquid crystal display, etc.

ADVANTAGE - There is uniform power distribution over the whole lamp volume, and the lamp has a high efficiency.

ABSTRACTED-PUB-NO: US 6060828A  
EQUIVALENT-ABSTRACTS:

The lamp has an electric field generated between the electrodes during pulsed operation. Through the construction of at least one of the electrodes and/or the dielectric material separating at least one electrode from the inside of the container, sites are created for local amplification of the electric field.

During the pulsed operation, one or more dielectrically hindered individual discharges are generated exclusively at these sites, but no more than one discharge per site. The mutual distances between the sites is chosen so that the discharges do not overlap. The distance normalised to the maximum extent of a discharge lies between 0.9 and 1.3.

USE - For office and home lighting, or backlighting liquid crystal display, etc.

ADVANTAGE - There is uniform power distribution over the whole lamp volume, and the lamp has a high efficiency.

CHOSEN-DRAWING: Dwg.1/5

DERWENT-CLASS: U14 W05 X26  
EPI-CODES: U14-K01A4C; W05-E05B; X26-A01C; X26-A02X;